Instructor: **Dr. Robert T. Hitlan**
Office: **Bartlett 1069**
Office Phone: **273-2223**
Office Hours: **M, W 10:00-11:00am and by appointment**
email: rob.hitlan@uni.edu

Course Website can be accessed via my homepage at: http://www.uni.edu/~hitlan/

Class Time: M, W, F   11:00 - 11:50 (Lang 12);
      Lab: F   12:00-12:50 (Sabin 109)

Required Text: Gravetter, F. J., & Wallnau, L. B (2013). Statistics for the Behavioral Sciences (9th Ed.). Pacific Grove, CA: Wadsworth/Cengage. ISBN-13: 9781111830991.

COURSE OVERVIEW:

This course provides students with an introduction to the basic methods of collecting, organizing, and analyzing psychological data. Students will learn a variety of descriptive and inferential statistical techniques. The inferential techniques include an emphasis on statistical inference (e.g., t tests, F tests, and selected non-parametric statistics). The course is designed to provide the student with the basic statistical concepts and skills necessary for the laboratory research, survey work and to provide adequate quantitative background for understanding psychological literature. Prerequisites: 400:1001; 400:3002; one college-level mathematics course or consent of instructor.

You are expected to read the chapters that correspond to the lectures **in advance** and complete the problem sets within each chapter. We will proceed from the front to the back of the book (we may not cover every chapter), excluded chapters will be announced.

Grading: Grading Scale:

Homework = 30%
Midterm Exams = 40%   93-100% = A
Final Exam = 20%   90-92% = A-
Laboratory Assignments = 10%   87-89% = B+
                                                                     83-86% = B
                                                                      80-82% = B-
                                                                     77-79% = C+
                                                                     73-76% = C
                                                                     70-72% = C-
                                                                     67-69% = D+
                                                                     63-66% = D
                                                                     60-62% = D-
                                                                      <60%   = F

HOMEWORK:

There will be approximately 12 homework assignments throughout the semester. Homework assignment comprise 30% of your overall course grade. Homework assignments will be given out at the end of class and due at the **beginning** of the next class meeting. If you are unable to attend class when a homework assignment is given out or when a homework assignment is due, never fear!

All homework assignments will be posted on the course website the same day that they are handed out in class. So…..even if you were not able to attend class you can still print off a copy of the homework assignment and have it completed by the due date. If you are not able to make it to class when a homework assignment is due, never fear!

You can email your homework assignment. If you choose to do this, make sure that the homework assignment is sent **no later** than the start of class for that day. **Please include your last name, your section number, and the homework assignment number in the subject line**.

Be advised - in order to be fair to all students, I will be checking the date/time emails were sent.

Why is this important; well…..**late homework will not be accepted (unless you are on official university business or have an acceptable excuse)**.

Consistent with Chapter 3, Section 3.06 of the university student policies and procedures manual, the following are legitimate reasons for absences:

- Required university related absences, including but not limited to athletic games/matches/meets or their equivalents.
- Absences due to military duty or veteran status, including service-related medical appointments where failure to appear might result in a loss of benefits.
- Absences because of pregnancy or childbirth for as long as the student's doctor deems the absences medically necessary. When a student returns to school, she must be allowed to return to the same academic and extracurricular status as before her medical leave began.
- Legally mandated absences such as jury duty or court subpoena.
- Students participating in required university or legally mandated absences must inform each faculty member of their known and anticipated absences as far in advance as possible. Failure to inform faculty beforehand, when it is clearly possible to do so, may be treated as an unexcused absence.

Faculty are not required to offer make-up work for extra credit tasks or assignments.

Except as outlined above, faculty members have the discretion to determine the reasonableness of absences due to extenuating circumstances, either predetermined or unexpected. Such absences include but are not limited to: non-university sanctioned educationally appropriate events and activities (e.g. attendance at a professional conference, lecture on campus); illness; significant personal emergency; bereavement; obligatory religious observances, etc."

Full details related to class attendance and make-up work can be found here: http://www.uni.edu/policies/306

There is no way to make up homework for unexcused absences, but **one homework grade -- the lowest -- will be dropped**.

In cases where students disagree with my unexcused absence determination, they are encouraged to become familiar with the appeal process outlined in **Section 7 of 12.01 Student Academic Grievance Policy**.

COURSE EXAMS:

There will be three exams throughout the semester. These will count for 40% of your overall grade in this course.

Each exam will consist of multiple choice, short answer questions, and problems. You are **NOT** permitted to use your book on any of the exams or the final exam. I do, however, allow you to use a formula card (5" x 7" max) on each of the midterms. The formula cards are for you to write formulas. You are **NOT** allowed, however, to put any words or other identifying information on the formula card (i.e., information to help you determine the correct formula to use with a given problem). Any formula card observed with this kind of information will be taken away prior to beginning an exam. If you are unsure of the type of information that is OK for the formula card **see me PRIOR** to the exam.

Exams **cannot** be made-up. Please refer to the information above regarding absences and make-up work for additional information on the relevant student policies and procedures related to absences and make-up work.

Students are expected to read the textbook chapters outside of class and consider class time as a period to clarify and expand on select topics. In my experience, students who read the textbook get higher grades than those who do not.

In addition, on exam days please make sure you have used the restroom recently because you will NOT be allowed to leave in the middle of an exam to use the restroom. One you leave the classroom, it is assumed you have completed your exam in its entirety.

LABORATORY ASSIGNMENTS:

During the semester you will have several lab sessions (this lab session is why statistics is a 4 hour course and not a three hour course). During lab each week you will learn different aspects of the statistical program SPSS. This is one of the most widely used statistical programs used in psychology, sociology business, etc...

The final exam will also consist of some output from this program that you will have to interpret (these should be easy points assuming you attend and listen at the lab sessions).

Overall the lab aspect of the course is worth 10% of your grade. We will have approximately 10 lab sessions throughout the semester and attendance **WILL** be taken at each lab session. I take attendance because sometimes you will not have a lab worksheet and taking attendance is the only way to fairly allocate lab credit in these instances.

The final exam is cumulative. Maybe more than any other course you will take in psychology, statistics is a building process. You will need to understand the material from previous chapters if you are to understand what the heck is going on later in the semester.

Not all instructors give cumulative final exams in statistics but I do. Research indicates that giving cumulative exams aids in the retention of knowledge and I want you to retain what you learn in this course or, at the very least, to be able to distinguish what are the appropriate statistics to use in a given situation.

Further, if you know where you made your mistakes on the midterm exams, the final should be mostly reviewing and applying what you already know. The final exam is worth 20% of your overall grade.

Final exams **cannot** be made-up. Please refer to the information above regarding absences and make-up work for additional information on the relevant student policies and procedures related to absences and make-up work.

CALCULATORS:

Calculators may be used for homework and exams. Also, we will be working through numerous examples during class so it is imperative that you bring your calculator to every class to work problems. At minimum, obtain a calculator that takes square roots.

Prior to exams, be sure to charge the batteries. I do **NOT** have spare calculators to lend out. Additionally, it is your responsibility to know how to work your own calculator. When in doubt, your first course of action should be to - **Read the manual of your calculator.**

Calculations:

a. Unless a problem is very simple, you should **show all work** that led to your final answer. Partial credit may be given if you do a problem by the correct procedure but make a minor computational error. However, if your final answer is incorrect and you do not show your intermediate work/computations, NO credit will be awarded.

b. **Be neat and systematic in displaying computations**. Do the problems in order, and clearly number all problems. If the grader cannot read your writing or cannot follow your computations, NO credit will be given for the problem.

c. Rounding: Unless instructed otherwise, round all answers to **three** decimal places (four decimal places when we discuss probability). If the digit in the fourth place is less than 5, do

not change the digit in the 3rd place. If the digit in the 4th place is equal to or greater than 5, raise the digit in the 3rd place by one point.

Examples:
2.4695 = 2.470
.0341 = .034
12.5954 = 12.595

ASSISTANCE:

The time to get assistance is when a difficulty first occurs, not the day before the midterm or final examination. This is particularly the case in statistics because each section may depend on the previous sections. If you do not understand something, there are several alternatives available:

a. Ask questions before, during, or after class.
b. See me during office hours.
c. Get help from Tutorial Services.
d. Ask a fellow student for assistance.

STUDENT CODE OF CONDUCT, INCLUDING CHEATING:

In short, cheating **will not be tolerated**.

Cheating is copying work, letting someone else copy your work, and sneaking peaks at other students' exams. Cheating represents a student ethics violation and is covered in the university's student policies and procedures located here: http://www.uni.edu/policies/chapter-3-student-policies.

Particularly relevant policies include:Chapter 3: Student Policies

3.01 Student Academic Ethics Policy

3.02 Student Conduct Code

3.03 Personal Conduct Rules

3.17 Personal Electronic Devices in the Classroom

(Additional Note: No personal electronic devices (other than one's non-phone calculator) are permitted to be used during any quizzes or exams).

It is the **student's responsibility** to understand what types of actions constitute ethical violations including cheating and the relevant sanctions associated with such behavior.

STUDENTS WITH DISABILITIES:

In compliance with the University of Northern Iowa policy and equal access laws, I am available to discuss appropriate academic accommodations that may be required for students with disabilities. Requests for academic accommodations are to be made **during the first three weeks of the semester**, except for unusual circumstances, so arrangements can be made. Students are encouraged to register with Student Disability Services, 103 Student Health Center, to verify their eligibility for appropriate accommodations.

No retroactive accommodations will be provided in this class. The web address for UNI Student Disability Services is http://www.uni.edu/sds/. This site provides detailed information about student, faculty, and university rights and responsibilities.

PET PEEVES:

1. Out of courtesy for both your fellow students and the instructor, make sure all electrical devices are shut off for the duration of class (e.g., pagers, cell phones, etc.)

2. If you must come to class late, do not walk in front of the instructor but take the first available seat

3. If you miss a class, please do not email me to ask what you missed or if the lecture material for that day was important. If I go over a topic – it **IS** important for you to know. Look at the course schedule and/or get the notes from a fellow student.

4. Other class disruptions are also frowned upon (e.g., sarcastic remarks directed toward another student and/or the instructor)

TENTATIVE COURSE SCHEDULE

Date		Chapter	Material	Assignments	Notes
Mon. Aug. 21		Introduction	Index Cards/Syllabus		
Weds. Aug. 23		Chapter 1	Introduction to Statistics		
Fri. Aug. 25		Chapter 1	Introduction to Statistics		
Mon. Aug. 28		Chapter 1	Introduction to Statistics	Homework #1 handed out	
Weds. Aug. 30		Chapter 2	Frequency Distributions	Homework #1 Due	
Fri. Sept. 1		Chapter 2	Frequency Distributions	Homework #2 handed out	**Lab #1**
Mon Sept. 4		**No Class**	**University Holiday**		
Weds. Sept. 6		Chapter 3	Central Tendency	Homework #2 Due	
Fri. Sept. 8		Chapter 4	Central Tendency	Homework #3 handed out	**Lab #2**
Mon. Sept. 11		Chapter 4	Variability	Homework #3 Due	
Weds. Sept. 13		Chapter 4	Variability		
Fri. Sept. 15		Chapter 5	Variability/z-scores	Homework #4 handed out	**Lab #3**
Mon. Sept. 18		Chapter 5	z-scores	Homework #4 Due	
Weds. Sept. 20		**Chapter 5/ Review Chapters 1-5**	z-scores/Review		
Fri. Sept. 22		**Exam #1**	**Exam #1**	**Exam #1**	
Mon. Sept. 25		Chapter 6	Probability		
Wed. Sept. 27		Chapter 6	Probability		

Fri. Sept. 29		Chapter 6	Probability	Homework #5 handed out	
Mon. Oct. 2		Chapter 7	Probability and Samples	Homework #5 Due	
Weds. Oct. 4		Chapter 7	Probability and Samples	Homework #6 handed out	
Fri. Oct. 6		Chapter 8	Introduction to Hypothesis Testing	Homework #6 Due	Lab #4
Mon. Oct. 9		Chapter 8	Introduction to Hypothesis Testing		
Wed. Oct. 11		Chapter 8/9	Introduction to Hypothesis Testing	Homework #7 handed out	
Fri. Oct. 13		Chapter 9	Introduction to the t-statistic	Homework #7 Due	Lab #5
Mon. Oct. 16		Chapter 9	Introduction to the t-statistic	Homework #8 handed out	
Wed. Oct. 18			Introduction to the t-statistic	Homework #8 Due	
Fri. Oct. 20		**Review Chapters 6-9**	**t-statistic/Review**		
Mon. Oct. 23		Exam #2	Exam #2	Exam #2	
Wed. Oct. 25		Chapter 10	t-test for Two Independent Samples		
Fri. Oct. 27		Chapter 10	t-test for Two Independent Samples	Homework #9 handed out	Lab #6
Mon. Oct. 30		Chapter 10/12	t-test for Two Independent Samples/ Introduction to	Homework #9 Due	

		Analysis of Variance (ANOVA)		
Wed. Nov. 1		Chapter 12	Introduction to Analysis of Variance (ANOVA)		
Fri. Nov. 3		Chapter 12	Introduction to Analysis of Variance (ANOVA)	Homework #10 handed out	**Lab #7**
Mon. Nov. 6		Chapter 12/14	Introduction to Analysis of Variance (ANOVA)/ Two Factor ANOVA	Homework # 10 due	
Wed. Nov. 8		Chapter 14	Two Factor ANOVA		
Fri. Nov. 10		Chapter 14	Two Factor ANOVA	Homework #11 handed out	**Lab #8**
Mon. Nov. 13		Chapter 14	Two Factor ANOVA	Homework #11 due	
Wed. Nov. 15		Chapter 14 / Review Chapters 10,12,14			
Fri. Nov. 17		**Exam #3**	**Exam #3**	**Exam #3**	
Mon. Nov. 20		**Thanksgiving Break**		**No Class**	**No Class**
Wed. Nov. 22		**Thanksgiving Break**	**No Class**		**No Class**
Fri. Nov. 24		**Thanksgiving Break**	**No Class**	**No Class**	
Mon. Nov. 27		Chapters 15/16	Correlation and Regression		
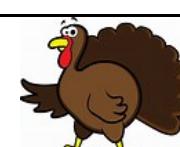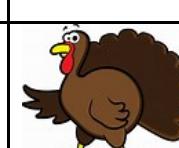
Wed. Nov. 29		Chapters 15/16	Correlation and Regression		
Fri. Dec. 1		Chapters 15/16	Correlation and Regression	Homework #12 handed out	Lab #9
Mon. Dec. 4		Chapters 17	Chi Square Statistic	Homework #12 Due	
Wed. Dec. 6		Chapter 17	Chi Square Statistic	In Class Problems	
Fri. Dec. 8		Chapter 17	Chi Square Statistic	In Class Problems	Lab #10?

Final Exam: Tuesday Dec. 12 @ 10-11:50